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**DISCOVERY MINES
LIMITED**

1971

ANNUAL REPORT

DISCOVERY MINES LIMITED

OFFICERS

J. C. BYRNE - - - - - *President*
 J. K. B. BOOTH - - - - - *Vice-President*
 D. R. McEWEN - - - - - *Secretary-Treasurer*

DIRECTORS

J. K. B. BOOTH - - - - - Toronto, Ont.
 J. C. BYRNE - - - - - Toronto, Ont.
 E. S. HOLMGREN - - - - - Detroit, Mich.
 H. EARL JOUDRIE - - - - - Calgary, Alta.
 D. O. MUNGOVAN, Q.C. - - - - - Toronto, Ont.
 G. T. SMITH - - - - - Toronto, Ont.
 V. VAN SANT, JR. - - - - - Calgary, Alta.

MANAGEMENT

J. C. BYRNE - - - - - Toronto, Ont.
Managing Director
 R. J. KILGOUR, P.Eng. - - - - - Avoca Mines, Ireland
General Manager

EXECUTIVE ENGINEER

L. A. BEDNARZ, P.Eng. - - - - - Toronto, Ont.

CONSULTANTS

NORMAN W. BYRNE, P.Eng. - - - - - Yellowknife, N.W.T.
 J. K. B. BOOTH, P.Eng. - - - - - Toronto, Ont.

SOLICITORS

MUNGOVAN & MUNGOVAN - - - - - 3050 Yonge St.
 Toronto, Ont.

AUDITORS

COLLINS, LOVE, EDDIS,
 VALIQUETTE & BARROW - - - - - 110 Yonge St.
 Toronto, Ont.

TRANSFER AGENTS AND REGISTRARS

CROWN TRUST COMPANY - - - - - 302 Bay St.
 Toronto, Ont.

BANKERS

BANKERS TRUST COMPANY - - - - - New York, N.Y.
 ROYAL BANK OF CANADA, Bay and Temperance Branch,
 Toronto, Ont.

EXECUTIVE OFFICE

Suite 1011, 2200 Yonge St., Toronto 12, Ont.

ANNUAL MEETING

June 16, 1972, 10:00 a.m., The Nova Scotia Room,
 Mezzanine Floor, Royal York Hotel, Toronto.

DISCOVERY MINES LIMITED

Directors' Report

TO THE SHAREHOLDERS:

We present herewith the Twenty-Fifth Annual Report of Discovery Mines Limited for the year ended December 31, 1971.

The Company can look back on the past twenty-five years with a sense of accomplishment. Inspired by a long and successful association with gold mining we are optimistic about the future for gold. The present is not without challenge, however, as efforts are directed toward ensuring the success of the Avoca mine in which a controlling equity is held; given buoyant copper prices the low grade operation can be expected to yield a satisfactory return on investment. The free market gold price having appreciated by twenty-five per cent during the past twelve months, your Company's inventory of gold prospects has gained in economic importance, and we foresee a metal price that will be attractive to their potential development.

AVOCA MINES CANADA LIMITED

Avoca Mines Canada and its wholly owned Irish subsidiary recorded a mine operating profit of \$770,923 for 1971, the first year of production. After interest deductions of \$188,720, depreciation and amortization expense of \$1,218,832, and head office charges of \$16,384, a net loss of \$653,013 is reported. Copper prices were depressed for most of the year; it was therefore expedient to initiate a number of capital projects to improve the profitability of the operation. Foremost in this regard was the advancement by one year of a 50 per cent increase in the milling rate to 3,000 tons per day, and the bringing into production of the Cronebane open pit deposit during the last quarter. Costs associated with the aforementioned together with tailings dam construction, major renovation of the underground ore conveyor system, and extensive development taxed Avoca's financial resources resulting in a further deterioration of the working capital position at year end. Consequently, in December Discovery purchased 900,000 treasury shares of Avoca Mines Canada at 60 cents per share to provide Avoca with \$540,000. Proceeds were used to reduce outstanding current liabilities. Long term debt of Avoca totals approximately \$5 million of which \$1,741,500 represents the costs of the concentrator and ancillary plant facilities acquired from the Irish Government; this obligation is repayable out of 15 per cent of annual net profits.

During 1971 a total of 874,175 tons of ore averaging 0.84 per cent copper was milled to produce 12.3 million pounds of copper in concentrate. Output of copper and pyrite concentrate was 30,019 and 30,969 dry short tons respectively. Sale of the by-product pyrite to a local government owned fertilizer manufacturer commenced early in 1972; terms of the contract call for minimum annual deliveries of 80,000 tons.

Underground ore, grading 0.91 per cent, provided three quarters of the total mill feed in 1971, while most of the balance was derived from low grade surface stockpiles. The Cronebane open pit began production in November and supplied a modest tonnage of good grade copper. The average daily mill rate for the initial nine months was 2,300 tons, but by year end over 2,900 tons per day were being treated, the increase reflecting the introduction of Cronebane as well as refinements to the grinding circuit.

Proven ore reserves at the underground mine are calculated at 3.5 million tons averaging 1.12 per cent copper before dilution; in addition there are probable reserves of 4.0 million tons of 0.93 per cent. Reserves in the Cronebane deposit have been conservatively estimated at 500,000 tons of 1.6 per cent copper. During stripping operations a new mineralized zone was unexpectedly discovered which

DISCOVERY MINES LIMITED

parallels the strike of the Cronebane orebody. cursory examination by trenching has disclosed excellent grade copper values over a 300 foot length exposed to date.

Avoca is expected to register improved earnings in 1972 due to a greater mill throughput, better overall ore grade, and a reduction in development expense. Anticipated copper production is 18 million pounds which would represent a 45 per cent increase over that of 1971. Average daily milling rate will be 3,000 tons as compared to last year's average of 2,400 tons per day.

Subject to the availability of funds, Avoca proposes to initiate before the end of this year a long range program to develop indicated ore reserves lying below the existing bottom mine level. This project would entail extension of the conveyor hoisting system, and relocation and installation of a larger underground crusher.

Avoca is controlled by Discovery which owns 3,159,470 common shares representing a 53.5 per cent interest. The accounts of Avoca are not consolidated with those of Discovery because, in the opinion of management, separate statements are more informative. Other major shareholders include the Superior Oil Group, Patino N.V., Northgate Exploration, and Tara Exploration and Development.

RAYROCK MINES LIMITED

As at December 31, 1971, Discovery owned 944,100 shares of Rayrock Mines representing a 21 per cent equity. Prior to year end Discovery sold, at a profit, 200,000 shares of its Rayrock holdings to Ashland Oil Canada Limited which resulted in Ashland's investment in Rayrock approximating that of Discovery.

For the fiscal year ended October 31, 1971, Rayrock reported a net profit of \$41,121 and a net cash flow of \$247,415. Income is derived from a 23.75 per cent interest in the Icon Sullivan Joint Venture copper operation in Quebec, from petroleum production in Ontario, and from investments. A considerable improvement in Rayrock's earnings is forecast for 1972 due in part to a reduction in exploration expenditures from last year's record \$412,000.

A 25 per cent participation in the Cordex Syndicate and an 11.8 per cent equity in Jorex Limited has rewarded Rayrock with an interest in a low grade gold discovery in Nevada and a promising fluorite find in northern British Columbia. Rayrock's other major exploration involvements include participation in the Icon and Caltor Syndicates, the former in its 13th year of activity, and also an interest in a joint venture regional prospecting effort in the Yukon.

CAMLAREN MINES LIMITED

Camlaren's gold mine in the Northwest Territories remained inactive during 1971. Although one is encouraged by the significant improvement in the gold price during the past year, a decision to deepen the shaft and to explore the depth potential of the known small but high grade deposit can only be justified by still higher prices in the order of \$70 per ounce.

Discovery owns a 70 per cent share interest in Camlaren Mines.

JOHNSBY MINES LIMITED

Discovery and Hydra Explorations Limited each own 1,500,000 shares of Johnsby Mines, a private Company that holds a gold prospect in the Indin Lake region of the Northwest Territories. The property comprises 68 contiguous mineral claims, and hosts a substantial tonnage, low grade gold deposit which was subject to extensive surface and underground exploration during the 1940's. Amenable in part to open pit mining, the occurrence represents a potentially viable undertaking at an \$80 gold price.

DISCOVERY MINES LIMITED

NORITA QUEBEC MINES LIMITED

During 1971 Noranda Exploration Company financed a program of geophysics and diamond drilling on the Norita Quebec Mines' property situated in Isle Dieu Township, northwestern Quebec. Some of the drilling was designed to investigate potential ground immediately on strike of the known deposit outlined some years ago, and indicated an expansion of the previous reserve estimate of 800,000 tons averaging 0.6 per cent copper, 7.3 per cent zinc, and 0.7 ounces silver per ton. Noranda has reported that additional exploration will be carried out in 1972.

Under the terms of the working option Noranda may, upon the expenditure of \$150,000 by the end of 1972, incorporate a new company, and Norita would receive a 25 per cent carried interest. Should the property be brought into production Norita would be entitled to \$373,484 out of initial profits as reimbursement for its expenditures on the claims.

Discovery owns 13.7 per cent of Norita, a private company. Other shareholders are Radiore Uranium Mines and Amagami Mines.

EXPLORATION

Discovery participated in three exploration ventures during the past year.

In the Bathurst region of New Brunswick a base metals prospect was optioned by Discovery in association with three other companies. Following geological mapping and geophysics a modest diamond drill program was undertaken which yielded negative results.

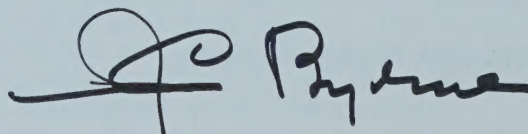
A syndicate comprised of Home Oil Company, Granite Mountain Mines, and Discovery financed geochemical prospecting of a coastal area south of Prince Rupert, British Columbia. Reconnaissance field work between April and August did not disclose any mineralized occurrences worthy of follow-up.

Encouraging field results were reported from geochemical and geological exploration of a 300 square mile district in south-central British Columbia. This venture, sponsored by Discovery Mines, International Mogul Mines, and Metron Exploration, was designed to prospect for possible sedimentary and porphyry type copper-molybdenum deposits. Both reconnaissance stream sediment sampling and detailed soil testing were carried out, and several claim groups staked to protect anomalous indications. Additional exploration to include drilling is planned, and the 1972 program will be largely financed by a fourth mining company that will earn an interest in the project for monies spent.

ACKNOWLEDGMENT

We wish to express our appreciation to all employees of the Company for their valued service during the year.

On behalf of the Board of Directors,



President and Managing Director.

Toronto, Canada
May 3, 1972

DISCOVERY MINES LIMITED

Statement of Operations

For the Year Ended December 31, 1971

	<u>1971</u>	<u>1970</u>
Income		
Investment income	\$ 110,649	\$ 62,363
Expenditure		
Property maintenance, Northwest Territories and Yukon	23,481	38,435
Head office, administrative and general expenses	53,627	57,943
Directors' fees	4,388	5,400
	<u>81,496</u>	<u>101,778</u>
Income (loss) before exploration expenditures	29,153	(39,415)
Exploration expenditures	64,308	43,626
Loss for the year	<u>\$ 35,155</u>	<u>\$ 83,041</u>
Loss per share	<u>\$ 0.01</u>	<u>\$ 0.03</u>

DISCOVERY MINES LIMITED

(Incorporated under the laws of Ontario)

Balance Sheet

ASSETS

Current assets

	1971	1970
Cash	\$ 52,360	\$ 82,652
Short term notes and certificates, at cost	75,000	350,000
Accounts receivable	3,086	29,335
Other short term investments, at cost	6,213	
	<hr/> 136,659	<hr/> 461,987
Investment in and advances to subsidiary companies (note 1)	2,758,721	305,572
Investment in other companies (note 2)	1,261,843	3,423,647

Mining properties

Mining claims and options — acquired for cash and shares of capital stock as valued by the directors of the company	140,914	141,364
Land, buildings, plant and equipment, at cost less realizations and accumu- lated depreciation (note 3)	83,514	87,710
Deferred exploration and development expenditures (note 4)	451,364	451,364
	<hr/> 675,792	<hr/> 680,438

Other assets

Mine stores, at cost	24,900	24,900
Prepaid expenses and sundry deposits	2,020	5,198
Incorporation expense	4,837	4,837
	<hr/> 31,757	<hr/> 34,935
	<hr/> \$4,864,772	<hr/> \$4,906,579

DISCOVERY MINES LIMITED

December 31, 1971

LIABILITIES

Current liabilities

	1971	1970
Accounts payable and accrued expenses	\$ 27,416	\$ 33,618
Unclaimed dividends	5,990	5,990
	<u>33,406</u>	<u>39,608</u>

SHAREHOLDERS' EQUITY

Capital stock (note 7)

Authorized

4,000,000 shares of \$1 par value each

Issued

2,748,773 shares 2,748,773 2,748,773

Contributed surplus 194,224 194,224

Retained earnings 1,888,369 1,923,974

4,831,366 4,866,971

The accompanying notes are an integral part of this financial statement.

Approved on behalf of the Board,

J. C. BYRNE, Director.

D. O. MUNGOVAN, Director.

\$4,864,772

\$4,906,579

DISCOVERY MINES LIMITED

Statement of Source and Application of Funds For the Year Ended December 31, 1971

	1971	1970
Source of funds		
Sale of investments	\$ 362,070	\$ 41,227
Sale of fixed assets	3,535	20,277
Reduction in prepaid expenses and sundry deposits	3,178	16,879
Sale of mine stores		249
	<u>368,783</u>	<u>78,632</u>
Application of funds		
Current operations		
Loss for the year	35,155	83,041
Depreciation	(661)	(826)
	<u>34,494</u>	<u>82,215</u>
Investment in other companies	94,157	659,875
Purchase of shares in subsidiary company	540,000	
Advances to subsidiaries	19,258	(1,438)
	<u>687,909</u>	<u>740,652</u>
Decrease in working capital	319,126	662,020
Working capital, beginning of the year	422,379	1,084,399
Working capital, end of the year	<u>\$ 103,253</u>	<u>\$ 422,379</u>

DISCOVERY MINES LIMITED

Statement of Retained Earnings

For the Year Ended December 31, 1971

	1971	1970
Balance, beginning of the year	\$1,923,974	\$2,007,015
Loss for the year	35,155	83,041
Mining claims allowed to lapse during the year	450	
	35,605	83,041
Balance, end of the year	<u>\$1,888,369</u>	<u>\$1,923,974</u>

AUDITORS' REPORT

To the Shareholders,
Discovery Mines Limited.

We have examined the balance sheet of Discovery Mines Limited as at December 31, 1971 and the statements of retained earnings, operations and source and application of funds for the year ended on that date. Our examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as we considered necessary in the circumstances.

In our opinion, these financial statements present fairly the financial position of the company as at December 31, 1971 and the results of its operations and the source and application of its funds for the year then ended, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

COLLINS, LOVE, EDDIS, VALIQUETTE & BARROW,
Chartered Accountants.

Toronto, Canada,
May 3, 1972.

DISCOVERY MINES LIMITED

Notes to the Financial Statements

December 31, 1971

1. Investment in and advances to subsidiary companies

	1971	1970
Avoca Mines Canada Limited		
3,159,470 shares (53.5% of outstanding capital)	\$2,021,408	\$
\$495,000 7% unsecured subordinated debentures	412,484	
Advances	14,948	
	<u>2,448,840</u>	
Camlaren Mines Limited		
2,091,799 shares (70% of outstanding capital)	250,800	250,800
Advances	59,081	54,772
	<u>309,881</u>	<u>305,572</u>
	<u>\$2,758,721</u>	<u>\$ 305,572</u>

The accounts of the subsidiaries have not been consolidated in these financial statements because:

- (a) In the opinion of management a separate statement for Avoca Mines Canada Limited is more informative;
- (b) Camlaren Mines Limited was inactive during 1970 and 1971.

2. Investment in other companies

	1971	1970
Rayrock Mines Limited		
944,100 shares — at cost (1970 — 1,093,400 shares)	\$1,003,802	\$1,151,304
Quoted market value \$1,085,700 (1970 — \$1,290,000)		
Other listed shares — at cost	29,006	82,639
Quoted market value \$23,000 (1970 — \$72,800)		
Other shares and debentures	229,035	223,692
Avoca Mines Canada Limited		
2,369,470 shares, at cost		1,553,528
\$495,000 7% debentures		412,484
	<u>\$1,261,843</u>	<u>\$3,423,647</u>

Because of the number of shares involved, the quoted market value of the investment in Rayrock Mines Limited is not necessarily indicative of the amount which would be realized if they were sold.

During the year by the purchase of additional shares the company acquired a controlling interest in Avoca Mines Canada Limited, which is now shown under investment in and advances to subsidiary companies.

3. Fixed assets at mine properties

Fixed assets at the company's inactive mining properties at La Forma, Yukon Territory and Discovery, Northwest Territories are carried at cost less realizations and accumulated depreciation to shut down dates. Management anticipates final realizations will be in excess of the amount shown.

4. Deferred exploration and development expenditures

Deferred exploration and development expenditures of \$451,364 consist of expenditures by a predecessor company on mining claims in the Matagami Lake area of Quebec and other locations. It is the policy

DISCOVERY MINES LIMITED

of the company to carry these expenditures forward until such time as they can be written off against revenue from these properties.

5. Remuneration of directors and senior officers

Directors and senior officers, as defined in The Business Corporations Act (Ontario), received direct remuneration in the year ended December 31, 1971 of \$23,212 from the company and \$29,350 from a subsidiary.

6. Pension plan

The company has a contributory pension plan covering four employees. The plan is financed by employee contributions of 5% of earnings and a company contribution which is written off as an expense when paid.

The plan is fully funded in accordance with actuarial calculations of the liability for accrued pension benefits.

7. Employees' incentive stock purchase options

Stock purchase options on 106,000 shares at a price of \$1.35 a share expire on October 31, 1973.

8. The company has guaranteed the indebtedness of a subsidiary, Avoca Mines Limited, in the amount of \$U.S. 225,000. which guarantee expires June 30, 1972.



View of Avoca Mines Plant Site.



Stripping operations at Cronebane Open Pit.

